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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,598	05/18/2006	Andrew David Laver Humphris	P2587US	1836

8968 7590 03/07/2007  
DRINKER BIDDLE & REATH LLP  
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CHICAGO, IL 60606

EXAMINER
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RAEVIS, ROBERT R

ART UNIT	PAPER NUMBER
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2856

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/564,598

Applicant(s)

HUMPHRIS ET AL.

Examiner

Robert R. Raevis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-33 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Either Figure 1(AFM) or Figure 1(nanolithography), or Figure 2(AFM), or Figure 2(nanolithography), or Figure 3(AFM), or Figure 3(nanolithography), or Figure 4(AFM), or Figure 4(nanolithography), or Figure 5(AFM), or Figure 5(nanolithography), or Figure 6(AFM), or Figure 6(nanolithography), or Figure 7(AFM), or Figure 7(nanolithography)

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Figure 2(AFM) includes claims 6-15,16-24,28,29-31.

Figure 2(nanolithography) includes claims 6-15,16-24,28,29,32.

Figure 3(AFM) includes claims 1-3,6-13,14,15,16-20,24,28,29-31.

Figure 3(nanolithography) includes claims 1-3,6-15,16-20,24,28,29,32.

Figure 4(AFM) includes claims 1,4,5,6-13,14,15,16-19,24,26,27,28-31.

Figure 4(nanolithography) includes claims 1,4,5,6-13,14,15,16-19,24,26,27,28-

33.

Figure 5(AFM) includes claims 1,4,5,6-13,14,15,16-19,24,26,27,28-31.

Figure 5(nanolithography) includes claims 1,4,5,6-13,14,15,16-19,24,26,27,28-

33.

Figure 6(AFM) includes claims 1,4,5,6-15,16-19,21,24,25,26,27,28,29-31.

Figure 6(nanolithography) includes claims 1,4,5,6-15,16-

19,21,24,25,26,27,28,29-33.

Figure 7(AFM) includes claims 1,4,5,6-15,16-19,21,24,26,27,28,29-31.

Figure 7(nanolithography) includes claims 1,4,5,6-15,16-19,21,24,26,27,28,29-

33.

Please note that many claims call for "microscope or for nanolithography", and that those two elements are not equivalents. Applicant is asked to select one over the other, as they are independent uses. Also, While Undersigned has attempted to group which claims are directed to particular Figures, Applicant should understand that they

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select an embodiment (i.e. a figure) and not claims. Thus, Applicant is urged to identify which claims read on the selected embodiment.

The following claim(s) are generic: no claim is truly generic to all possible embodiments due to the "microscope or for nanolithography" limitation which provides for two independent inventions in many of the same claims.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Figure 2 employs a coating and vibration isolation, Figure 3 provides for magnet usage, Figure 4 provide for a damping coating and bias voltage 60, Figure 4 calls for a tuning fork 16, Figure 5 calls for providing scan by transducer 70 connected to the sample carrier, Figure 6 calls for a liquid environment; Figure 7 calls for a transducer 70 connected to the resonator. The nanolithography embodiments are used for writing, while the AFM embodiments are for measuring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday-Friday alternating with Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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RAEVI